



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0257/S, REVISION 6**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - AEA Technology QSA, Inc. Model 849.
2. Source Description - Cylindrical single encapsulation made of Type 410 stainless steel and seal welded. Approximate exterior dimensions are 12.7 mm (0.5 in.) in diameter and either 38 mm (1.5 in.) or 50.8 mm (2.0 in.) in length. Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. R84901, Rev. C.
3. Radioactive Contents - No more than either 55.5 TBq (1,500 Ci) Iridium-192 in the 38 mm (1.5 in.) length capsule, or 74 TBq (2,000 Ci) Iridium-192 in the 50.8 mm (2.0 in.) length capsule, or 37 TBq (1,000 Ci) Selenium-75 in either length capsule, or 37 GBq (1.0 Ci) Californium-252 in either length capsule. The Ir-192 is in solid metallic form. The Se-75 is in the form of a metal-selenide pellet. The Cf-252 is in the form of a metal wire or an oxide solid ceramic.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires September 30, 2007. On December 31, 2003, this certificate supersedes, in its entirety, all previously issued revisions of USA/0257/S.

1 "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

CERTIFICATE USA/0257/S, REVISION 6

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated August 19, 2003, August 29, 2003 and November 7, 2003 submitted by AEA Technology QSA, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified by:



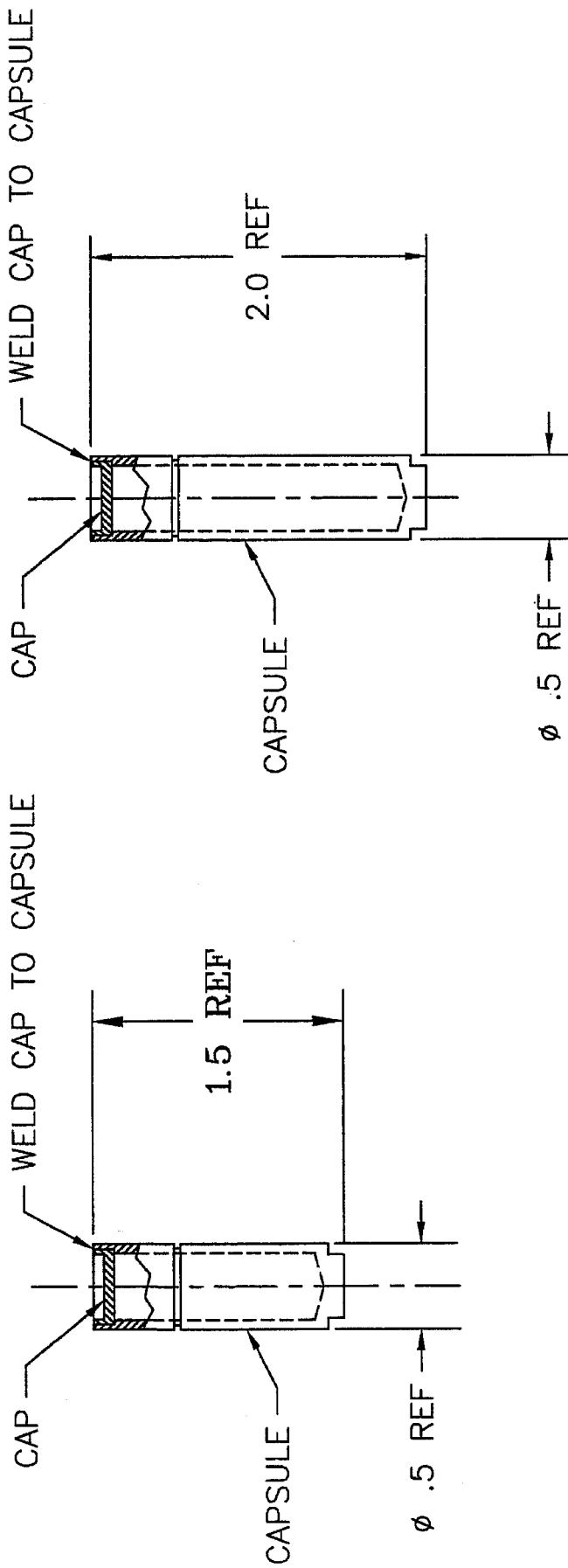
Robert A. McGuire

Associate Administrator for
Hazardous Materials Safety

NOV 17 2003

(DATE)

Revision 6 - Issued to add Californium-252.



VERSION 1

VERSION 2

NOTE:

1. LEAK TEST IN ACCORDANCE WITH ANSI N43.6 OR ISO 9978.

APPROVALS	
<i>R. Munn</i>	6 Nov 03
<i>K. G. G. G.</i>	6 Nov 03

	
40 NORTH AVE, BURLINGTON, MA 01803	
DESCRIPTIVE DRAWING	

DIMENSIONS IN INCHES TOLERANCES: FRACTIONS ±1/16 X ± 0.1 XX ± 0.01 XXX ± 0.005	
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TITLE 849 CAPSULE, ASSEMBLY	
SIZE A	DWG. NO. R84901
SCALE: NONE	SHEET 1 OF 1
REV C	REV C

ERF#707